

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated February 9, 2006, has been received and its contents carefully reviewed.

Claims 1-20 are rejected to by the Examiner. Claims 1, 2, 12, and 14 have been amended. Claims 1-20 remain pending in this application.

In the Office Action, claims 1, 5-8, 11, and 12 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,604,608 to Franchi (hereinafter "Franchi"). Claims 2-4, 9, 10 and 13-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Franchi in view of U.S. Publication No. 2003/0070571 to Hodge et al. (hereinafter "Hodge").

The rejection of claims 1-12 is respectfully traversed and reconsideration is requested. Claims 1, 5-8, 11, and 12 are allowable over the cited references in that each of these claims recites a combination of elements including, for example, "a means for supplying a high-power electrical charge across the uninsulated replaceable fusible link sufficient to heat and break the uninsulated replaceable fusible link underwater." Franchi does not teach or suggest at least this feature of the claimed invention.

Franchi is directed to a system that releases payloads from balloons in air. Nowhere does Franchi disclose the use of its system underwater. The present invention is directed to a fusible link operating underwater that must be able to overcome the very high thermal conductivity of the water and must be able to heat the element to the melting point in the presence of that rapid water cooling. Further, Franchi is not suitable for underwater operation because of its relative complexity and fragility. The use of Franchi underwater would lead to failure due to biofouling of the spring and the use of a glass rod. For example, the glass rod may be subject to breakage when it is dropped into the water or when subjected to shifting and surging currents. Accordingly, Applicant respectfully submits that claims 1, 5-8, 11, and 12 are allowable over the cited references.

Claims 2-4, 9, and 10 depending from claim 1 and are allowable over Franchi for the same reasons stated above. Hodge fails to cure the deficiencies of Franchi, so claims 2-4, 9, and 10 are allowable over the cited references.

The rejection of claims 13-20 is respectfully traversed and reconsideration is requested. Claims 13-20 are allowable over the cited references in that each of these claims recites a combination of elements including, for example, "activating a switch to release the stored charge across the uninsulated replaceable fusible link to break the uninsulated replaceable fusible link underwater, wherein the stored charge is sufficient and is delivered at sufficient power to break the uninsulated replaceable fusible link." None of the cited references including Franchi and Hodge, singly or in combination, teaches or suggests at least this feature of the claimed invention. These claims are allowable for the same reasons discussed above. Accordingly, Applicant respectfully submits that claims 13-20 are allowable over the cited references.


A telephone call to the Examiner on March 20, 2006, confirmed that the drawings were accepted.

Applicants believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. *A duplicate copy of this sheet is enclosed.*

Respectfully submitted,

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